

Amendments to Claims / Listing of Claims:

1. (CURRENTLY AMENDED) In a console processing unit for goods
5 inventory management coupled via the Internet to at least one fixed detector and at least
one mobile sensor, a data structure for representing a monitored object, the data structure
comprising:

an object identifier, such object identifier representing one or more goods in
production, inventory and shipment;

10 a first object location and a time monitored at such location, provided by a
detector coupled to the console processing unit; and

a second object location and a time monitored at such location, provided by a
sensor coupled to the console processing unit;

wherein an access means processes the data structure securely using a digital
15 certificate, watermark or encryption key, such that the data structure is accessible for
object-monitoring from only one or more specified network site or processor, the data
structure being provided automatically using control software for network surveillance in
response to a user search query, the software comprising a network and data
communication module, an object and map database, an object movement processing
20 module, a security management module, an electronic transaction processing module, a
diagnosis tool, a performance report updater module, and a visual object analyzer module
comprising a neural network or simulation program for recognizing adaptively one or
more identified goods for real-time tracking of multiple goods movement, whereby such
modules are functionally integrated to enable surveillance-based commercial transaction
25 using the data structure.

2. (PREVIOUSLY PRESENTED) The data structure of Claim 1 further
comprising:

a scheduled object location and a time scheduled for such location.

3. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:
a position signal being generated by the detector coupled to the monitored object
when such object is moveable within an observable range, a visual signal being generated
by the sensor uncoupled to such object in the observable range.

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4. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:
the detector comprises an accelerometer.

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5. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:
a software agent associated with the monitored object accesses a database.

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6. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:
the object identifier comprises an object name, an object group, an object query,
an object condition, an object status, an object location, an object time, an object error, or
an object image, video, or audio broadcast signal.

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7. (PREVIOUSLY PRESENTED) The data structure of Claim 3 wherein:
the observable range is modifiable according to a rule set.

8. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:
the monitored object is monitored temporarily using an extrapolated or last-stored
positional or visual signal.

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9. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:
the monitored object is authenticated according to a voice pattern, a finger-print
pattern, a handwritten signature, or a magnetic or smart-card signal.

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10. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:
the monitored object is provided an electronic file comprising a book, a greeting
card, a news report, a sports report, a stock report, an artwork, a research database, a

personal list, a recorded or live voice or music transmission, an electronic tool, or a commercial transaction.

11. **(CURRENTLY AMENDED)** In a console processing unit for goods
5 inventory management coupled via the Internet to at least one fixed detector and at least one mobile sensor, a method for processing a data structure for representing a monitored object, the method comprising the step of:

transmitting to a processor in a network a data structure comprising an object
identifier, such object identifier representing one or more goods in production, inventory
10 and shipment, a first object location and a time monitored at such location, the first object location being provided by a detector coupled to a console processing unit, and a second object location and a time monitored at such location, the second object location being provided by a sensor coupled to the console processing unit; wherein an access means processes the data structure securely using a digital certificate, watermark or encryption
15 key, such that the data structure is accessible for object-monitoring from only one or more specified network site or processor, the data structure being provided automatically using control software for network surveillance in response to a user search query, the software comprising a network and data communication module, an object and map database, an object movement processing module, a security management module, an
20 electronic transaction processing module, a diagnosis tool, a performance report updater module, and a visual object analyzer module comprising a neural network or simulation program for recognizing adaptively one or more identified goods for real-time tracking of multiple goods movement, whereby such one or more of such modules are functionally integrated to enable surveillance-based commercial transaction using the data structure.

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12. **(PREVIOUSLY PRESENTED)** The data structure of Claim 1 wherein:
the sensor comprises a radio-frequency identification device for locating the identified goods, and the detector comprises a camera for observing such identified goods, thereby enabling the sensor and the detector to provide corroborative surveillance

of the identified goods within an observable range in which the sensor is mobile relative to the detector.

13. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:
5 the sensor comprises a sensor signal port for sensing a low-power or fuel
condition of the identified goods, thereby enabling the console processing unit to indicate
or warn a down period for using the identified goods.

14. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:
10 the detector comprises visual-analyzer means for recognizing adaptively the
identified goods using a neural network or simulation program, thereby enabling secure
inventory management of the identified goods.

15. (PREVIOUSLY PRESENTED) The data structure of Claim 1 wherein:
15 the data structure indicates in-stock availability of the identified goods for
transacting shipment, and a tax-rate for transaction at the location of the identified goods.

16. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:
the sensor comprises a radio-frequency identification device for locating the
20 identified goods, and the detector comprises a camera for observing such identified
goods, thereby enabling the sensor and the detector to provide corroborative surveillance
of the identified goods within an observable range in which the sensor is mobile relative
to the detector.

17. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:
25 the sensor comprises a sensor signal port for sensing a low-power or fuel
condition of the identified goods, thereby enabling the console processing unit to indicate
or warn a down period for using the identified goods.

18. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:
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the detector comprises visual-analyzer means for recognizing adaptively the identified goods using a neural network or simulation program, thereby enabling secure inventory management of the identified goods.

5 19. (PREVIOUSLY PRESENTED) The method of Claim 11 wherein:
the data structure indicates in-stock availability of the identified goods for transacting shipment, and a tax-rate for transaction at the location of the identified goods.

20. (CURRENTLY AMENDED) In a network for goods inventory management
10 for coupling at least one fixed detector and at least one mobile sensor, a single-chip integrated circuit for processing a data structure for representing a monitored object, the circuit comprising:

a processor provided in a wireless target unit for transmitting or receiving in a network a data structure comprising an object identifier, such object identifier
15 representing one or more goods in production, inventory and shipment, a first object location and a time monitored at such location, the first object location being provided by a detector, and a second object location and a time monitored at such location, the second object location being provided by a sensor; wherein an access means processes the data structure securely using a digital certificate, watermark or encryption key, such that the
20 data structure is accessible for object-monitoring from only one or more specified network site or processor, the data structure being provided automatically using control software for network surveillance in response to a user search query, the software comprising a network and data communication module, an object and map database, an object movement processing module, a security management module, an electronic
25 transaction processing module, a diagnosis tool, a performance report updater module, and a visual object analyzer module comprising a neural network or simulation program for recognizing adaptively one or more identified goods for real-time tracking of multiple goods movement, whereby one or more of such modules are functionally integrated to enable surveillance-based commercial transaction using the data structure.

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21. (PREVIOUSLY PRESENTED) The circuit of Claim 20 wherein:

the sensor comprises a radio-frequency identification device for locating the identified goods, and the detector comprises a camera for observing such identified goods, thereby enabling the sensor and the detector to provide corroborative surveillance of the identified goods within an observable range in which the sensor is mobile relative
5 to the detector.

22. (PREVIOUSLY PRESENTED) The circuit of Claim 20 wherein:
the sensor comprises a sensor signal port for sensing a low-power or fuel
condition of the identified goods, thereby enabling indication or warning of a down
10 period for using the identified goods.

23. (PREVIOUSLY PRESENTED) The circuit of Claim 20 wherein:
the detector comprises visual-analyzer means for recognizing adaptively the
identified goods using a neural network or simulation program, thereby enabling secure
15 inventory management of the identified goods.